DEC 9 1992

NY

New York State Department of Environmental Conservation
50 Wolf Road, Albany, New York 12233 -4253

Thomas C. Jorling
Commissioner

December 7, 1992

Mr. James P. Linnane
U.S. Forest Service
P.O. Box 640
Durham, New Hampshire 03824

Dear Jim:

New York State's 1992 Forest Health Report is enclosed. I will request the DEC regions to sketch defoliation of gypsy moth and forest tent caterpillar on 1:100,000 scale maps and send the completed maps to you as soon as possible.

At least one of four topographic maps you have on order is needed by me to complete the mapping of gypsy moth defoliation. Margaret Weeks has the names of the quadrangles on order.

I hope to fully incorporate the record forms in our forest health work in 1993. I think the direction we are heading is the correct one.

Very truly yours,

Michael J. Birmingham
Associate Forester

Enclosure

printed on recycled paper

NY

FOREST HEALTH

AFFECTED FOREST TYPES * / OTHER **	ACRES/AREA AFFECTED	SEVERITY/PATTERN (Define classes)
Northern Hardwoods	31,000 total	30% to 59%
Northern Hardwoods	58,125 / 89,125	60% to 100%

* Forest Type Group - White-Red-Jack Pine, Spruce Fir, Hard Pine, Oak-Pine, Oak Hickory, Oak-Gum-Cypress, Elm-Ash-Cottonwood, Northern Hardwood, Aspen-Birch.

**Other - Urban-Ornamental, Nursery, Plantation.

DAMAGE

DAMAGE CAUSING AGENT Forest Tent Caterpillar

SCIENTIFIC NAME Malacosoma disstria

SPECIFIC TREE SPECIES AFFECTED Variety of hardwoods including sugar maple and quaking aspen.

AGE OF AFFECTED TREES (understory, pole, mature, regeneration) Major infestations occur in mature hardwoods, but all age classes can be defoliated.

SURVEY METHOD Aerial sketch mapping to delineate defoliation. Ground checks to identify causal agents. Egg mass sequential surveys by cut twig or binoculars to estimate defoliation.

TREATMENT (if any) Some maple growers hire aerial sprayers when egg densities indicate potential for serious defoliation or when caterpillars appear in large numbers on maple foliage.

TREND (past and future) In the past two years the population trend has been up. It appears from sightings of caterpillars in 1992 and egg counts in the fall of 1992 that the population is increasing throughout its range in New York State.

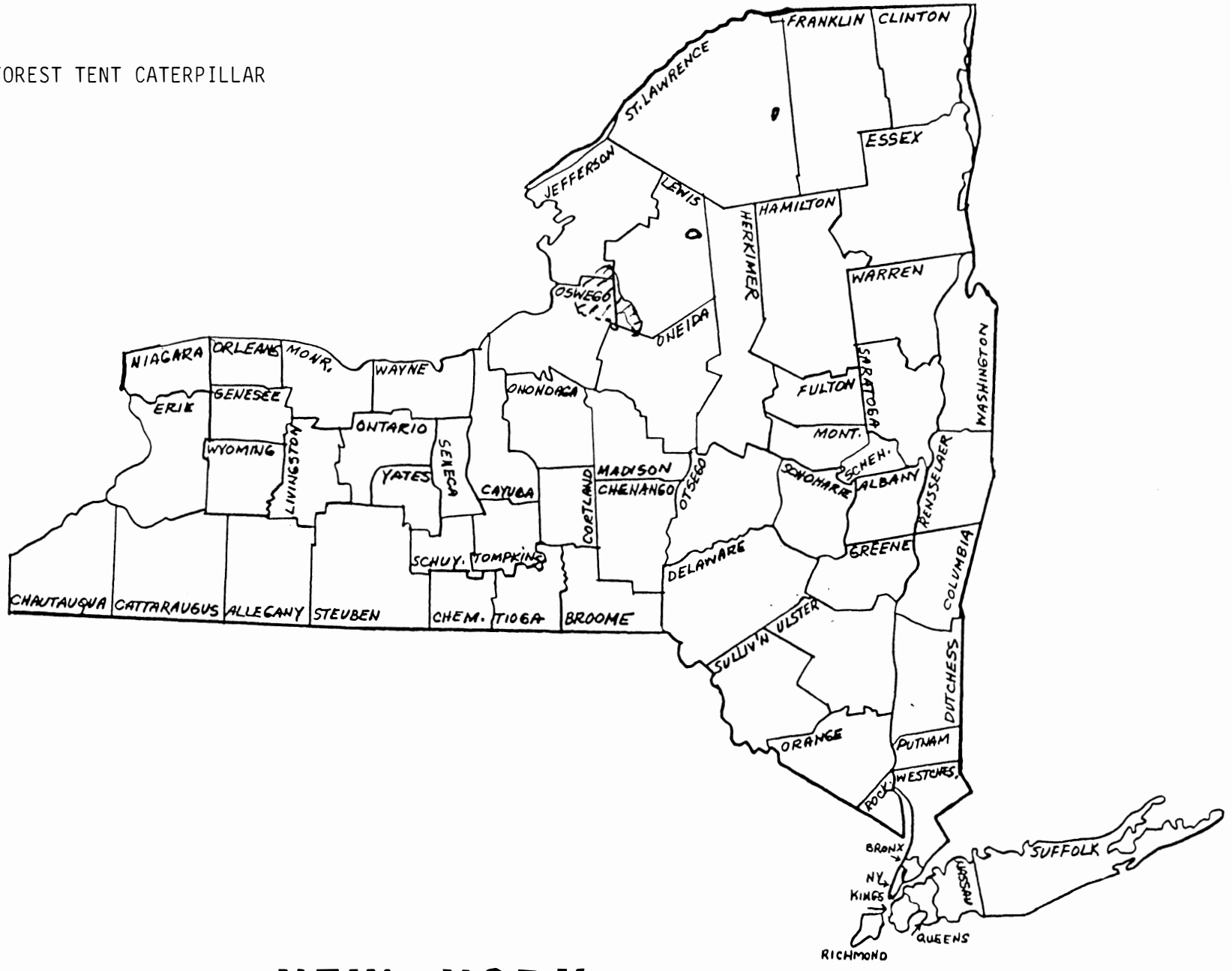
LOCATION **MAP ENCLOSED** Yes_____ **TAPE ENCLOSED** _____

STATEWIDE **OR:**

COUNTIES Jefferson, 6,000
Lewis, 46,000
Oneida, 50
Oswego, 37,000
St. Lawrence, 75

Comments: Forestry staff have sighted large numbers of forest tent caterpillars throughout western New York counties. Also sightings of small numbers of forest tent caterpillars seen in Delaware and Schoharie Counties.

FOREST TENT CATERPILLAR



NEW YORK

NY

FOREST HEALTH

AFFECTED FOREST TYPES * / OTHER **	ACRES/AREA AFFECTED	SEVERITY/PATTERN (Define classes)
Oak/Hickory	44,492	30% to 59%
Oak/Hickory	15,530	60% to 100%

* Forest Type Group - White-Red-Jack Pine, Spruce Fir, Hard Pine, Oak-Pine, Oak Hickory, Oak-Gum-Cypress, Elm-Ash-Cottonwood, Northern Hardwood, Aspen-Birch.

**Other - Urban-Ornamental, Nursery, Plantation.

DAMAGE

DAMAGE CAUSING AGENT Gypsy Moth

SCIENTIFIC NAME Lymantria dispar

SPECIFIC TREE SPECIES AFFECTED Red, White, Chestnut oaks and associated species.

AGE OF AFFECTED TREES (understory, pole, mature, regeneration) Primarily mature, but all aged classes affected.

SURVEY METHOD Aerial sketch mapping and ground checks to delimit and identify causal agent. Egg mass surveys used to predict defoliation.

TREATMENT (if any) DEC does not apply pesticides for gypsy moth suppression.

TREND (past and future) Recent population trend is down; future trend appears stable at relatively low levels.

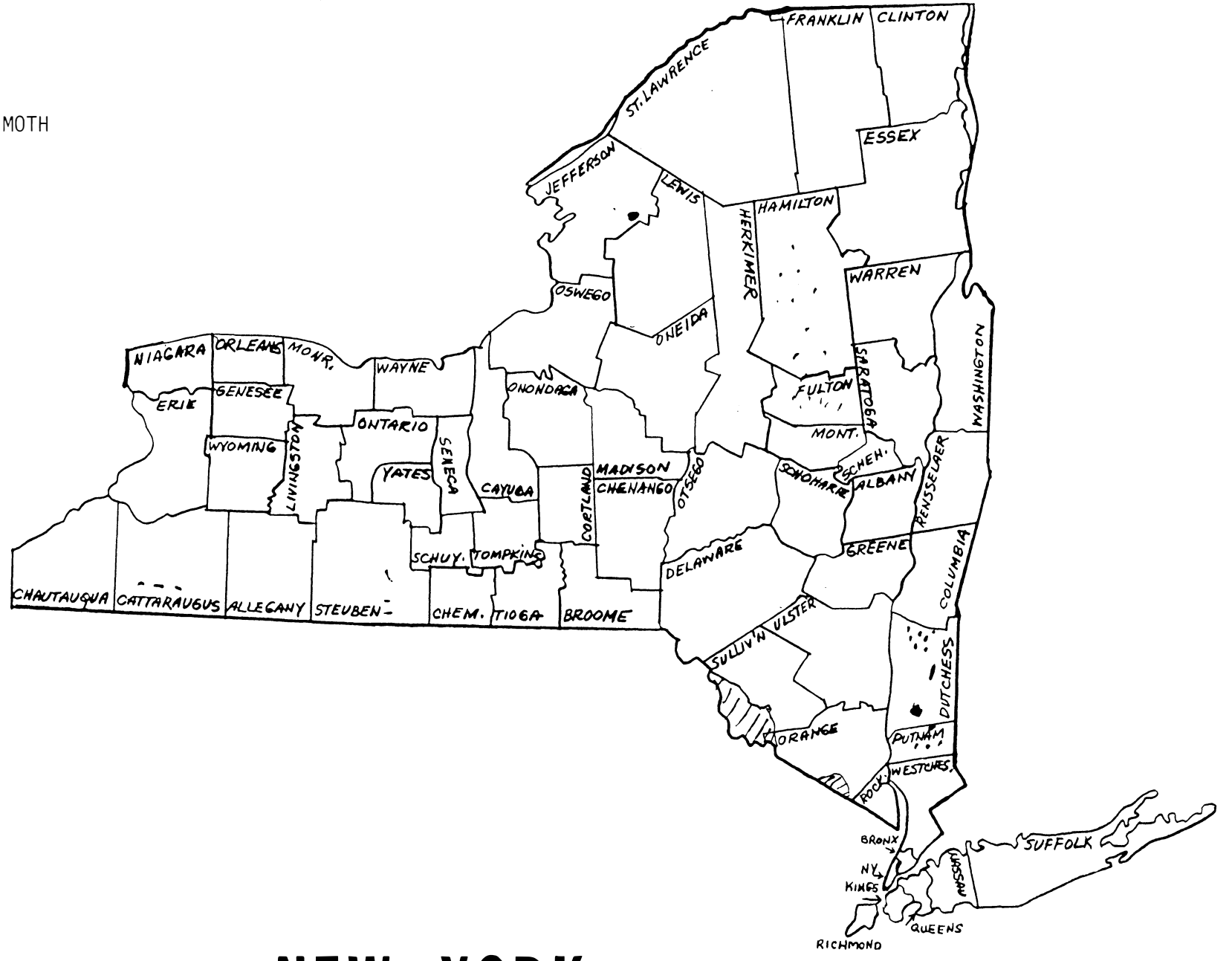
LOCATION **MAP ENCLOSED** Yes_____ **TAPE ENCLOSED** _____

STATEWIDE **OR:**

COUNTIES

Cattarugus, 582	Steuben, 6,000
Fulton, 660	Sullivan, 27,300
Hamilton, 130	
Jefferson, 50	
Orange, 25,300	

GYPSY MOTH



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FOREST HEALTH

AFFECTED FOREST TYPES * / OTHER **	ACRES/AREA AFFECTED	SEVERITY/PATTERN (Define classes)
Oak/Hickory		

* Forest Type Group - White-Red-Jack Pine, Spruce Fir, Hard Pine, Oak-Pine, Oak Hickory, Oak-Gum-Cypress, Elm-Ash-Cottonwood, Northern Hardwood, Aspen-Birch.

**Other - Urban-Ornamental, Nursery, Plantation.

DAMAGE

DAMAGE CAUSING AGENT Hemlock Woolly Adelgid

SCIENTIFIC NAME Adelges tsugae

SPECIFIC TREE SPECIES AFFECTED Eastern Hemlock

AGE OF AFFECTED TREES (understory, pole, mature,regeneration) all age classes

SURVEY METHOD Detection and identification from the ground using foliage symptoms to locate possible infestations and pruning branches and examination under hand lens to determine if hemlock woolly adelgid

TREATMENT (if any) Horticulture oils and insecticidal soaps widely used on ornamental trees. DEC does no spraying nor provides funds for spraying.

TREND (past and future) Spread northward has slowed in past two years. However, infestation of hemlock woolly adelgids has spread throughout infested counties and from Pennsylvania into western Orange County to the City of Port Jervis.

LOCATION **MAP ENCLOSED** Yes_____ **TAPE ENCLOSED** _____

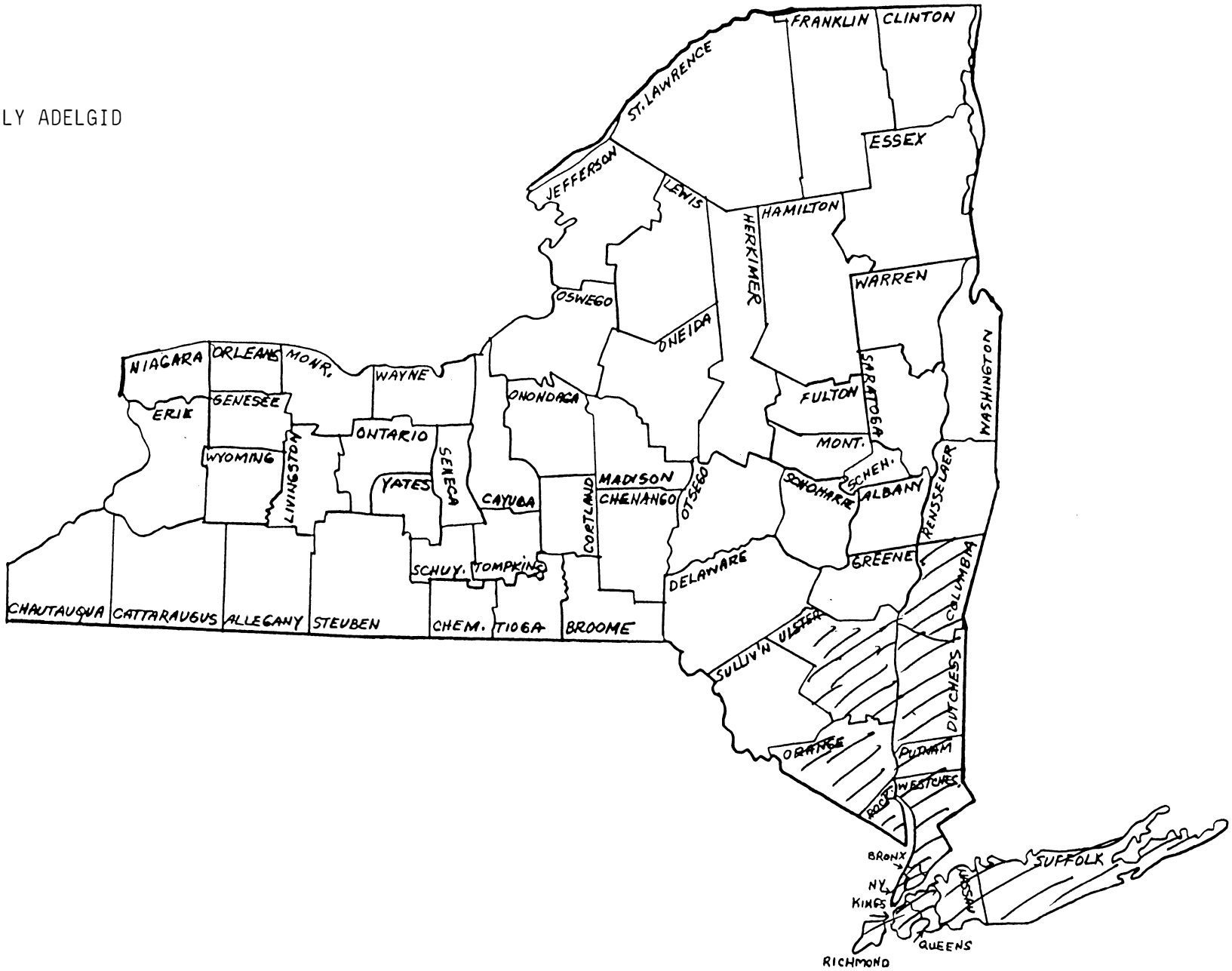
STATEWIDE _____ **OR:**

COUNTY Suffolk_____
Nassau_____
All New York City Counties__
Westchester_____
Putnam_____

COUNTIES Dutchess_____
Rockland_____
Orange_____
Ulster_____
_____

COMMENTS The latest confirmed infestation of hemlock woolly adelgid was found in the Town of Saugerties, Ulster County, only a couple of miles from Greene County.

HEMLOCK WOOLLY ADELGID



NEW YORK

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FOREST HEALTH

AFFECTED FOREST TYPES * / OTHER **	ACRES/AREA AFFECTED	SEVERITY/PATTERN (Define classes)
Pine Plantations	150,000	60% to 100%

* Forest Type Group - White-Red-Jack Pine, Spruce Fir, Hard Pine, Oak-Pine, Oak Hickory, Oak-Gum-Cypress, Elm-Ash-Cottonwood, Northern Hardwood, Aspen-Birch.

**Other - Urban-Ornamental, Nursery, Plantation.

DAMAGE

DAMAGE CAUSING AGENT Pine False Webworm

SCIENTIFIC NAME Acantholyda erythrocephala

SPECIFIC TREE SPECIES AFFECTED White, Scotch, Red and Jack Pines

AGE OF AFFECTED TREES (understory, pole, mature, regeneration) all age classes

SURVEY METHOD Aerial detection and ground inspections. Pupal surveys and larval surveys conducted. Measurements of volume losses also made in some infested stands.

TREATMENT (if any) DEC is conducting salvage cuts of upwards of 5 MMBF annually. County and private pine growers are also cutting to salvage pines dying from defoliation caused by the pine false webworm in combination with European pine sawfly.

TREND (past and future) Increasing eastward into Franklin County. Intensity of mortality increasing.

LOCATION **MAP ENCLOSED** Yes_____ **TAPE ENCLOSED** _____

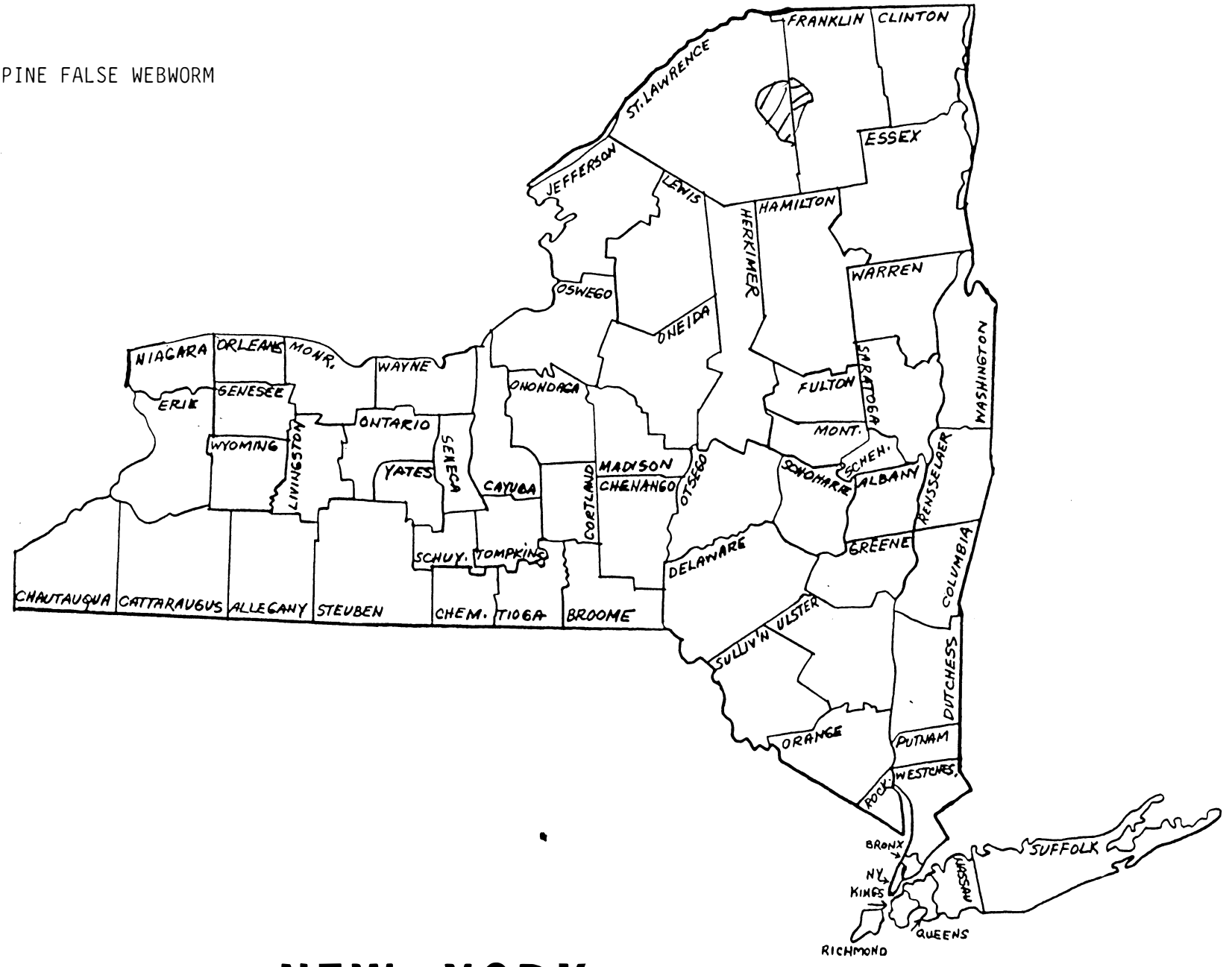
STATEWIDE_____ **OR:**

COUNTY St. Lawrence, 130,000 **TOWNSHIP** _____

Franklin, 20,000

COMMENTS Black turpentine beetle and Ips pini attacking and hastening the death of infested pines. County environmental group and county forestry staff very concerned about the infestation. Pines are dying on deep, well drained soils. Pines were originally planted to help stabilize sands that tend to be wind swept.

PINE FALSE WEBWORM



NEW YORK

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FOREST HEALTH

AFFECTED FOREST TYPES * / OTHER **	ACRES/AREA AFFECTED	SEVERITY/PATTERN (Define classes)
Red pine plantations		

* Forest Type Group - White-Red-Jack Pine, Spruce Fir, Hard Pine, Oak-Pine, Oak Hickory, Oak-Gum-Cypress, Elm-Ash-Cottonwood, Northern Hardwood, Aspen-Birch.

**Other - Urban-Ornamental, Nursery, Plantation.

DAMAGE

DAMAGE CAUSING AGENT Red pine scale

SCIENTIFIC NAME Matsucoccus resinosae

SPECIFIC TREE SPECIES AFFECTED Red Pine

AGE OF AFFECTED TREES (understory, pole, mature, regeneration) pole and mature

SURVEY METHOD Inspect red pine on perimeter of known infestations for white egg sacs in October or cut branches and examine under a microscope for life stages of the red pine scale under bark flaps.

TREATMENT (if any)

TREND (past and future) stable

LOCATION **MAP ENCLOSED** Yes_____ **TAPE ENCLOSED** _____

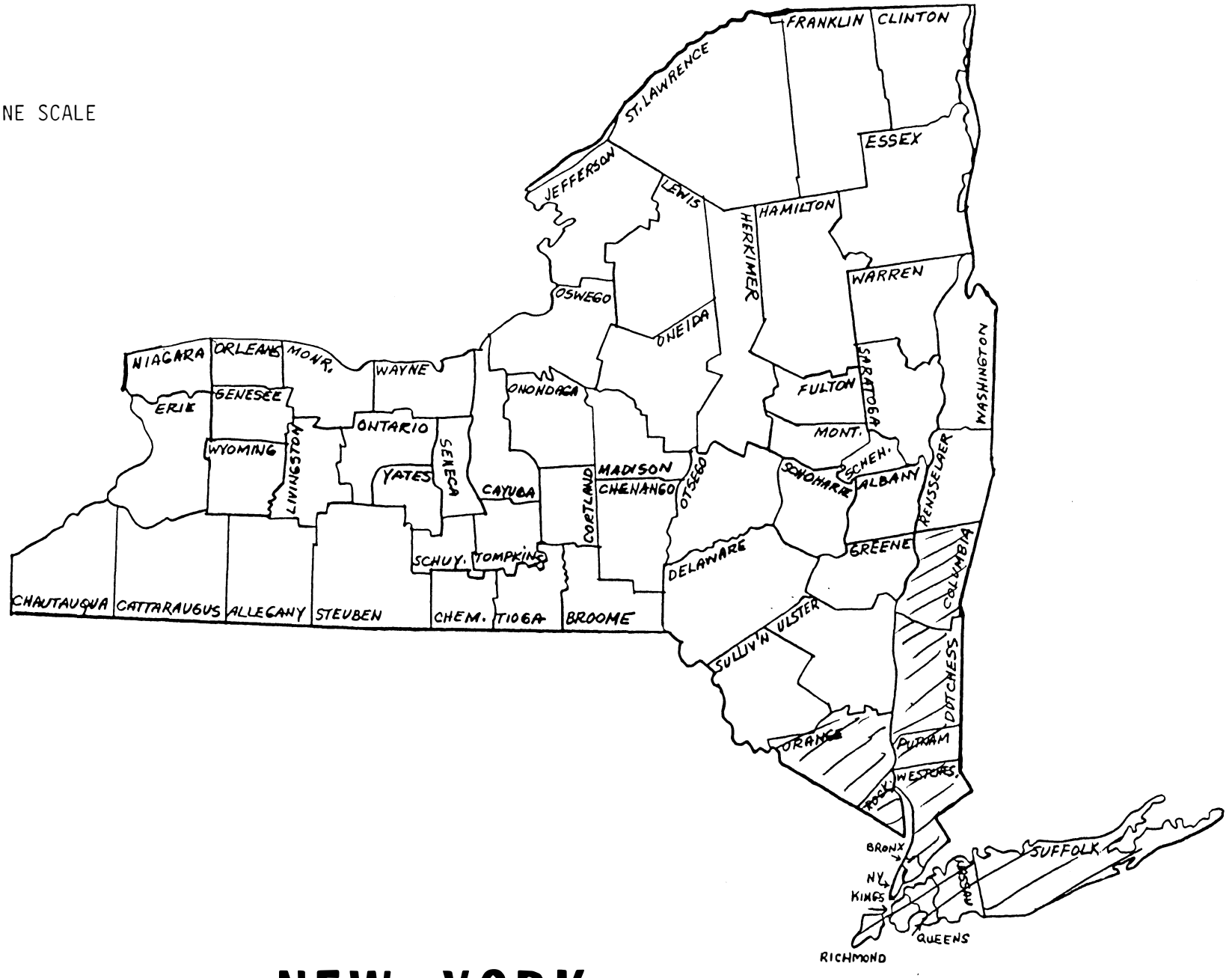
STATEWIDE _____ **OR:**

COUNTY Suffolk_____
Nassau_____
all New York City Counties__
Westchester_____
Putnam_____

COUNTIES Dutchess_____
Rockland_____
Orange_____
Columbia_____
_____

COMMENTS Red pine scale appears to have reached its northern limit in New York State. The most northern infestation occurs in southern Columbia County. Within the infested counties most red pine has declined and died either from the scale or a combination of scale and red pine adelgid. Additionally, pines to the north of the red pine scale infestation have declined on shallow heavy soils. Many pine stands have toppled in the wind.

RED PINE SCALE



NEW YORK

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FOREST HEALTH

AFFECTED FOREST TYPES * / OTHER **	ACRES/AREA AFFECTED	SEVERITY/PATTERN (Define classes)
Spruce/Fir	750	30% to 59%
Spruce/Fir	7500	60% to 100%

* Forest Type Group - White-Red-Jack Pine, Spruce Fir, Hard Pine, Oak-Pine, Oak Hickory, Oak-Gum-Cypress, Elm-Ash-Cottonwood, Northern Hardwood, Aspen-Birch.

**Other - Urban-Ornamental, Nursery, Plantation.

DAMAGE

DAMAGE CAUSING AGENT Eastern Spruce Beetle

SCIENTIFIC NAME Dendroctonus rufipennis

SPECIFIC TREE SPECIES AFFECTED Red, White, and Black Spruces

AGE OF AFFECTED TREES (understory, pole, mature, regeneration) Mature

SURVEY METHOD Aerial detection

TREATMENT (if any)

TREND (past and future) Up in Hamilton and stable in Fulton Counties

LOCATION **MAP ENCLOSED** Yes_____ **TAPE ENCLOSED** _____

STATEWIDE_____ **OR:**

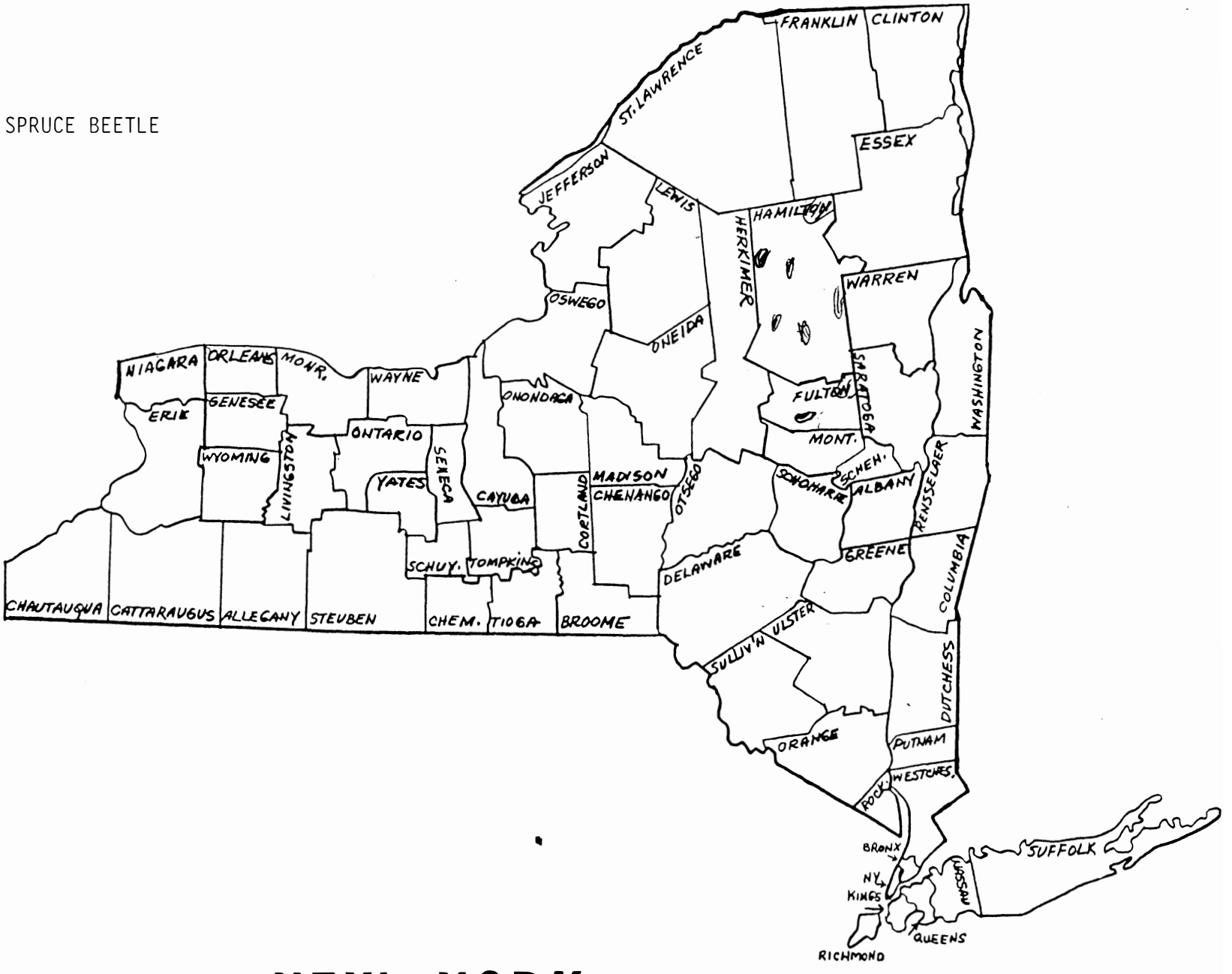
COUNTY Fulton, 750 **TOWNSHIP** _____

Hamilton, 7,500

(If needed, continue on reverse side)

COMMENTS

EASTERN SPRUCE BEETLE



NEW YORK

NY

FOREST HEALTH

AFFECTED FOREST TYPES * / OTHER **	ACRES/AREA AFFECTED	SEVERITY/PATTERN (Define classes)
Spruce/fir		

* Forest Type Group - White-Red-Jack Pine, Spruce Fir, Hard Pine, Oak-Pine, Oak Hickory, Oak-Gum-Cypress, Elm-Ash-Cottonwood, Northern Hardwood, Aspen-Birch.

**Other - Urban-Ornamental, Nursery, Plantation.

DAMAGE

DAMAGE CAUSING AGENT Spruce Budworm

SCIENTIFIC NAME Choristoneura fumiferana

SPECIFIC TREE SPECIES AFFECTED Balsam fir, White, Black, and Red Spruces

AGE OF AFFECTED TREES (understory, pole, mature, regeneration) pole and mature

SURVEY METHOD Pheromone traps

TREATMENT (if any)

TREND (past and future) down

LOCATION **MAP ENCLOSED** no_____ **TAPE ENCLOSED** _____

STATEWIDE _____ **OR:**

COUNTY St. Lawrence_____ **TOWNSHIP** _____

Lewis_____ _____

Jefferson_____ _____

Northern Oneida_____ _____

COMMENTS Low moth counts in traps. Of the 312 moths captured, 241 were caught in three traps. Last year's moth counts was 782.

NY

FOREST HEALTH

AFFECTED FOREST TYPES * / OTHER **	ACRES/AREA AFFECTED	SEVERITY/PATTERN (Define classes)
Oak/Pine	25,000	60% to 100%

* Forest Type Group - White-Red-Jack Pine, Spruce Fir, Hard Pine, Oak-Pine, Oak Hickory, Oak-Gum-Cypress, Elm-Ash-Cottonwood, Northern Hardwood, Aspen-Birch.

**Other - Urban-Ornamental, Nursery, Plantation.

DAMAGE

DAMAGE CAUSING AGENT Frost

SCIENTIFIC NAME

SPECIFIC TREE SPECIES AFFECTED Scrub oak

AGE OF AFFECTED TREES (understory, pole, mature, regeneration) Mature

SURVEY METHOD Visual inspection of symptoms of oaks from the ground.

TREATMENT (if any)

TREND (past and future) One time event.

LOCATION **MAP ENCLOSED** Yes_____ **TAPE ENCLOSED** _____

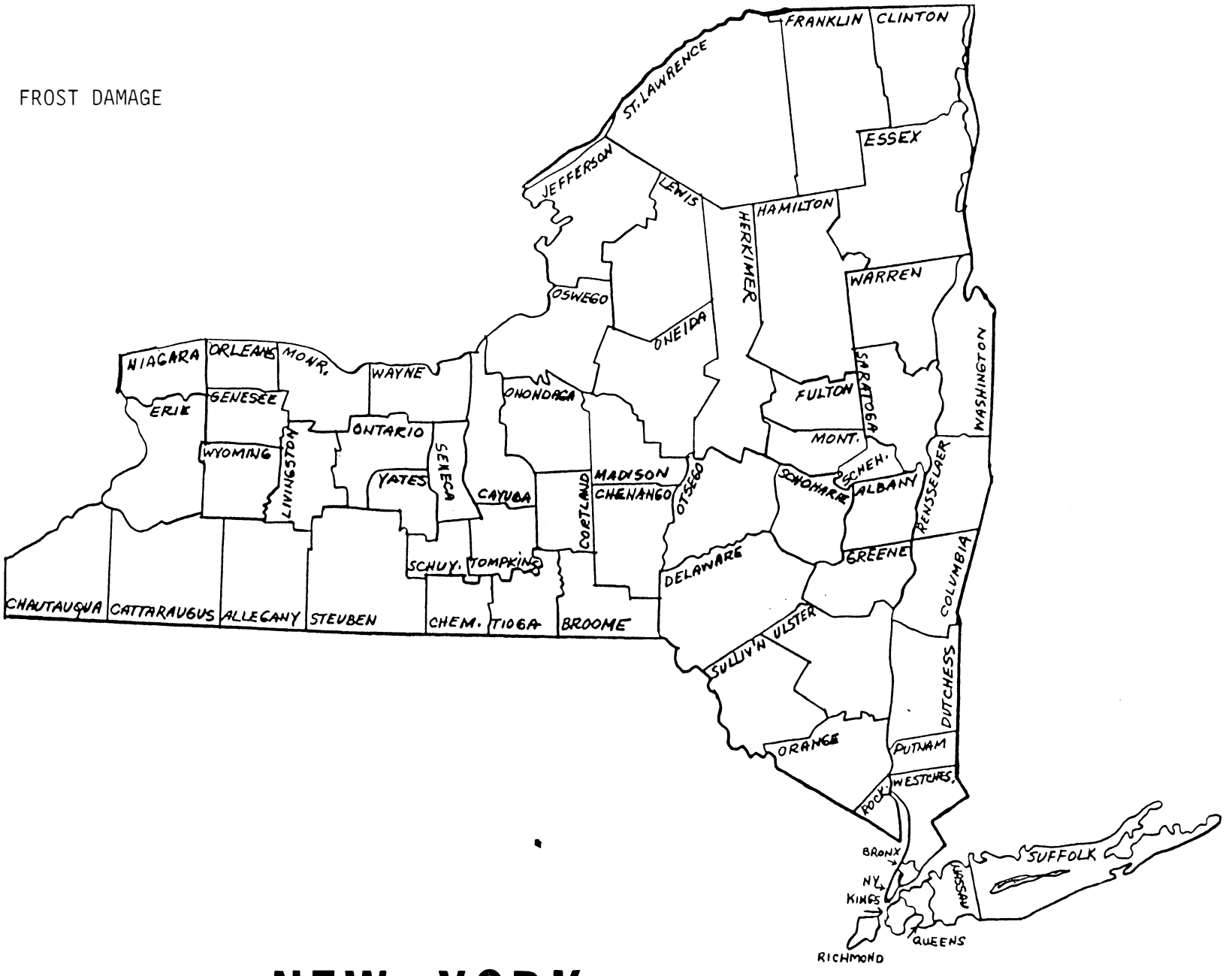
STATEWIDE_____ **OR:**

COUNTY Suffolk, 25,000
St. Lawrence
Lewis

COUNTIES Jefferson
Herkimer
Oneida

COMMENTS A frost killed leaves of scrub oak during bud break. Trees put out new growth. No acreage figures or species listed for frost damage in northern New York.

FROST DAMAGE



NEW YORK

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FOREST HEALTH

AFFECTED FOREST TYPES * / OTHER **	ACRES/AREA AFFECTED	SEVERITY/PATTERN (Define classes)
Pine Plantations		

* Forest Type Group - White-Red-Jack Pine, Spruce Fir, Hard Pine, Oak-Pine, Oak Hickory, Oak-Gum-Cypress, Elm-Ash-Cottonwood, Northern Hardwood, Aspen-Birch.

**Other - Urban-Ornamental, Nursery, Plantation.

DAMAGE

DAMAGE CAUSING AGENT Scleroderris Canker

SCIENTIFIC NAME Scleroderris lagerbergii

SPECIFIC TREE SPECIES AFFECTED Red, Jack and Scotch Pines

AGE OF AFFECTED TREES (understory, pole, mature, regeneration) all age classes, but young trees more readily killed than older trees.

SURVEY METHOD Inspections of known infection centers and of trees with discolored foliage.

TREATMENT (if any)

TREND (past and future) Stable and at a low level for past seven growing seasons.

LOCATION **MAP ENCLOSED** No _____ **TAPE ENCLOSED** _____

STATEWIDE _____ **OR:**

COUNTY	Lewis	**TOWNSHIP**	
	Jefferson		
	Northern Oneida		
	Herkimer		

COMMENTS Mortality of pines infected with scleroderris is spotty.